

Message Text

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ACTION EUR-12

INFO OCT-01 ARA-14 ISO-00 ACDA-12 CIAE-00 INR-10 IO-14
L-03 NSAE-00 NSC-05 EB-08 NRC-07 OES-07 SOE-02
DODE-00 SS-15 SP-02 CEQ-01 PM-05 /118 W
-----091757 131958Z /43

P R 131716Z MAR 78
FM AMEMBASSY BONN
TO SECSTATE WASHDC PRIORITY 6712
INFO AMEMBASSY BRASILIA PRIORITY
USDOE WASHDC PRIORITY
USDOE GERMANTOWN PRIORITY
AMEMBASSY PARIS
AMEMBASSY BERN
AMEMBASSY BRUSSELS
AMEMBASSY VIENNA
AMEMBASSY LONDON
AMEMBASSY THE HAGUE
AMCONSUL RIO DE JANEIRO
AMCONSUL SAO PAULO

UNCLAS SECTION 01 OF 02 BONN 04549

E.O. 11652: N/A
TAGS: TECH, PARM, MNUC, ENRG, GW, BR
SUBJECT: GERMAN/BRAZILIAN NUCLEAR COOPERATION

REF: (A) BONN 3873, (B) BONN 4450

1. TEXT OF KFA JUELICH-NUCLEBRAS STATEMENT OF
COOPERATION WHICH WAS FORMALLY SIGNED AT JUELICH ON
MARCH 8, 1978, (PARA 3, REF A) IS GIVEN IN PARA 2
BELOW. INTERESTING TO NOTE THAT LAST WEEK'S FRG-GOB
NUCLEAR DISCUSSIONS WERE ALL CARRIED OUT IN ENGLISH
AND ORIGINAL TEXT OF STATEMENT OF INTENT IS IN ENGLISH
LANGUAGE.

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2. QUOTE:

STATEMENT OF INTENT BETWEEN KFA AND NUCLEBRAS ON
COOPERATION IN THE FIELD OF HIGH-TEMPERATURE REACTORS
AND GAS-COOLED FAST BREEDER REACTORS AND OF THE
THORIUM CYCLE IN HIGH-TEMPERATURE REACTORS AND
LIGHT-WATER REACTORS AS WELL AS IN GAS-COOLED FAST

BREEDER REACTORS

WHEREAS, THE GOVERNMENT OF THE FEDERATIVE REPUBLIC OF BRAZIL AND THE GOVERNMENT OF THE FEDERAL REPUBLIC OF GERMANY ENTERED INTO A BASIC AGREEMENT ON JUNE 9, 1969 ON COOPERATION IN SCIENTIFIC RESEARCH AND TECHNOLOGICAL DEVELOPMENT, INCLUDING COOPERATION IN NUCLEAR RESEARCH AND DEVELOPMENT, WHICH SHALL BECOME THE SUBJECT OF SPECIAL AGREEMENTS;

WHEREAS SUCH A SPECIAL AGREEMENT HAS BEEN IN FORCE SINCE APRIL 23, 1971 BETWEEN KERNFORSCHUNGSANLAGE JUELICH GMBH (KFA) AND COMIS SAO NACIONAL DE ENERGIA NUCLEAR (CNEN) AND WAS EXTENDED BY AN AMENDMENT OF OCTOBER 3, 1973 TO THE BRAZILIAN COMPANY FOR NUCLEAR TECHNOLOGY (CBTN), OF WHICH NUCLEBRAS IS THE LEGAL SUCCESSOR;

WHEREAS THE AFOREMENTIONED AMENDED SPECIAL AGREEMENT SPECIFIES, AMONG THE VARIOUS AREAS OF COOPERATION IN NUCLEAR RESEARCH AND NUCLEAR TECHNOLOGICAL DEVELOPMENT:

1) PRODUCTION OF NUCLEAR ENERGY; 2) RAW MATERIALS USED IN NUCLEAR TECHNOLOGY, AND 3) NUCLEAR FUELS AND FUEL CYCLES;

NOW THEREFORE EMPRESAS NUCLEARES BRASILEIRAS S.A. - UNCLASSIFIED

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NUCLEBRAS AND KERNFORSCHUNGSANLAGE JUELICH GMBH (KFA), IN AGREEMENT WITH THEIR GOVERNMENTS, ARE PLANNING TO INTENSIFY THEIR COLLABORATION IN THE FIELD OF HIGH-TEMPERATURE REACTORS AND LIGHT-WATER REACTORS AND TO HENCEFORTH INCLUDE IN THIS COLLABORATION THE GAS-COOLED FAST BREEDER REACTOR AS WELL.

THE INTENDED COOPERATION BETWEEN KFA AND NUCLEBRAS IN THE FIELD OF HIGH-TEMPERATURE REACTOR DEVELOPMENT WILL COVER THE FOLLOWING SUBJECTS:

- PHYSICS OF THE HTR PEBBLE-BED CORE, IN PARTICULAR WITH REGARD TO THE URANIUM-THORIUM FUEL CYCLE AND THE THORIUM BREEDER CONCEPT;
- THERMODYNAMIC DESIGN OF THE CORE AND THE OTHER PRIMARY CIRCUIT COMPONENTS FOR BOTH POWER PRODUCTION AND UTILIZATION OF HTR PROCESSHEAT;
- DESIGN OF THE NUCLEAR HEAT PRODUCTION SYSTEM;
- STRATEGIC STUDIES CONCERNING THE URANIUM-THORIUM

CYCLE, COMPRISING THE ALTERNATIVES OF REPROCESSING
AND LONGTIME STORAGE UNDER THE ASPECTS OF ECONOMIC
EFFICIENCY, SAFETY AND ENVIRONMENTAL IMPACT;

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- ANALYSIS OF THORIUM AVAILABILITY;
- EVALUATION OF STRATEGIES FROM THE POINT OF VIEW OF
FUEL ELEMENT FABRICATION AND REPROCESSING;
- FUNDAMENTAL INVESTIGATIONS INTO THE FABRICATION OF
URANIUM-THORIUM FUEL PARTICLES FOR HTR FUEL ELEMENTS
AND PROBLEMS RELATING TO THE REPROCESSING AND
REFABRICATION OF SUCH FUEL ELEMENTS.

FURTHERMORE, KFA AND NUCLEBRAS ARE PLANNING TO EXTEND

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THEIR COOPERATION ACTIVITIES IN THE FIELD OF FUEL
ELEMENT DEVELOPMENT AND IRRADIATION FOR LIGHT-WATER
REACTORS, WHICH HAVE BEEN PERFORMED SINCE 1975 WITH
KWU AS ADDITIONAL PARTNER AND FOCUSED ON THE URANIUM-
PLUTONIUM CYCLE, TO ALSO INCLUDE THE URANIUM-THORIUM
FUEL CYCLE, AND TO CARRY OUT SUPPLEMENTARY STRATEGIC
CALCULATIONS FOR LWR'S WITH U-TH FUEL.

KFA AND NUCLEBRAS INTEND TO ALSO COOPERATE HENCEFORTH
IN THE FIELD OF GAS-COOLED FAST BREEDER REACTOR
DEVELOPMENT. COOPERATION IS CHIEFLY INTENDED TO
INVOLVE STUDIES OF THE FUEL CYCLE AS WELL AS FUNDAMENTAL
WORK RELATING TO THE DEVELOPMENT OF FUEL AND BREEDER
ASSEMBLIES, COVERING THE URANIUM-THORIUM CYCLE IN
ADDITION TO THE URANIUM-PLUTONIUM CYCLE.

THE PARTNERS ARE AWARE THAT THE ABOVE MENTIONED
PROGRAMMES HAVE LONG-TERM OBJECTIVES AND ARE INTENDED
TO BE AN ADDITION TO THE CURRENT INDUSTRIAL
COOPERATION AGREEMENT BETWEEN THE BRAZIL AND THE
FEDERAL REPUBLIC OF GERMANY.

THE PARTNERS AGREE THAT EVERY EFFORT SHOULD BE DONE TO
MAKE THE BEST POSSIBLE USE OF COMPETENT INSTITUTIONS
IN THEIR RESPECTIVE COUNTRIES FOR THE IMPLEMENTATION
OF THE AFOREMENTIONED PROGRAMMES.

JUELICH, MARCH 8TH, 1978

EMPRESAS NUCLEARES BRASILEIRAS S.A.
NUCLEBRAS

KERNFORSCHUNGSANLAGE JUELICH
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GESELLSCHAFT MIT BESCHRANKTER HAFTUNG
UNQUOTE.

3. TEXTS OF OTHER TECHNICAL AGREEMENTS SIGNED LAST
WEEK WILL FOLLOW SEPTTEL.
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Message Attributes

Automatic Decaptioning: X
Capture Date: 01 jan 1994
Channel Indicators: n/a
Current Classification: UNCLASSIFIED
Concepts: AGREEMENTS, NUCLEAR COOPERATION PROGRAMS
Control Number: n/a
Copy: SINGLE
Draft Date: 13 mar 1978
Decaption Date: 01 jan 1960
Decaption Note:
Disposition Action: n/a
Disposition Approved on Date:
Disposition Case Number: n/a
Disposition Comment:
Disposition Date: 01 jan 1960
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1978BONN04549
Document Source: CORE
Document Unique ID: 00
Drafter: n/a
Enclosure: n/a
Executive Order: N/A
Errors: N/A
Expiration:
Film Number: D780111-1091
Format: TEL
From: BONN
Handling Restrictions: n/a
Image Path:
ISecure: 1
Legacy Key: link1978/newtext/t19780377/aaaacndv.tel
Line Count: 221
Litigation Code IDs:
Litigation Codes:
Litigation History:
Locator: TEXT ON-LINE, ON MICROFILM
Message ID: 845974c8-c288-dd11-92da-001cc4696bcc
Office: ACTION EUR
Original Classification: UNCLASSIFIED
Original Handling Restrictions: n/a
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a
Page Count: 5
Previous Channel Indicators: n/a
Previous Classification: n/a
Previous Handling Restrictions: n/a
Reference: 78 BONN 3873, 78 BONN 4450
Retention: 0
Review Action: RELEASED, APPROVED
Review Content Flags:
Review Date: 03 mar 2005
Review Event:
Review Exemptions: n/a
Review Media Identifier:
Review Release Date: n/a
Review Release Event: n/a
Review Transfer Date:
Review Withdrawn Fields: n/a
SAS ID: 3356772
Secure: OPEN
Status: NATIVE
Subject: GERMAN/BRAZILIAN NUCLEAR COOPERATION
TAGS: TECH, PARM, MNUC, ENRG, GE, BR
To: STATE
Type: TE
vdkgvwkey: odb://SAS/SAS.dbo.SAS_Docs/845974c8-c288-dd11-92da-001cc4696bcc
Review Markings:
Sheryl P. Walter
Declassified/Released
US Department of State
EO Systematic Review
20 Mar 2014
Markings: Sheryl P. Walter Declassified/Released US Department of State EO Systematic Review 20 Mar 2014